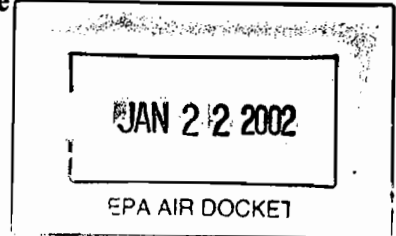


A-95-32  
N-D-9

**Comments of  
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**National Emission Standards for Hazardous Air Pollutants: Asphalt Processing  
and Asphalt Roofing Manufacturing; Proposed Rule**

**66 Fed. Reg. 58610 (November 21, 2001)  
Air Docket No. A-95-32**



**A. *Introduction***

San Joaquin Refining Company (SJR) appreciates the opportunity to file these comments on the proposed rules listed above. SJR is an oil refiner located in Bakersfield, California that processes roofing and paving asphalt as well as process oils and diesel fuel. With 106 employees, SJR is considered a "small" independent refiner.

Thus, EPA's proposed maximum achievable control technology (MACT) standards for asphalt processing will directly affect us. These standards, which will be codified at 40 CFR part 63, subpart LLLLL, will have a great effect on SJR as well as our customers.

Moreover, SJR brings a perspective to this rulemaking different than that likely to be brought by many other commenters. Our company does not own or operate a stand-alone asphalt processing facility. Rather, our asphalt processing operations are located within our petroleum refinery. For this reason, we are particularly concerned that the asphalt processing provisions of the rules should be written clearly so that they do not mistakenly apply to other equipment, operations and processes at our petroleum refinery. It is also important that the applicability provisions not confuse asphalt processors about the scope of the rules. In these comments we therefore suggest language changes that will make the rules less vague in this regard.

While SJR focuses primarily on applicability issues in these comments, we also are interested in other aspects of the proposal that are being addressed by other trade associations. Rather than duplicate the comments of the Asphalt Institute (AI), the Asphalt Roofing Manufacturers Association (ARMA) and the National Petrochemical & Refiners Association (NPRA), we hereby endorse and incorporate by reference their comments on the proposal. In addition, following the applicability sections of these comments we address the erroneous and troubling statements about health effects found in the proposal. With that having been said, immediately below we discuss the applicability issues that are of greatest concern to SJR.

**B. Definitions of Asphalt Processing Facility, Asphalt Storage Tank, and Asphalt Loading Rack**

As noted above, SJR processes paving and roofing asphalt products at our refinery in Bakersfield, California. As EPA staff know, asphalt processing is but one of many manufacturing activities that may take place at a refinery. These other processes are or will be covered by a variety of Clean Air Act (CAA) rules, including the previously issued MACT standards for petroleum refineries. See 40 CFR Part 63, subpart CC (§§ 63.640 to 63.654). For this reason, it is important for EPA to make clear that only tanks and other equipment directly associated with asphalt processing operations will be subject to the subpart LLLLL standards. In addition, some refineries oxidize asphalt that is not used for roofing products. EPA should clarify that only processing of asphalt that is bound for use in the roofing industry is covered by the MACT standards. We cover each of these two points below, and suggest how EPA can change the proposal's definitions of "asphalt processing facility", "asphalt storage tank", and "asphalt loading rack" to correct these problems.

**1. Ensuring That Only Asphalt Processing Operations Are Covered**

Although we read the proposal's preamble to demonstrate EPA's intent to have the subpart LLLLL standards apply only to asphalt operations at petroleum refineries, we believe that regulators or citizen groups might think the rules apply more broadly. In addition, asphalt processors could be confused given the current wording of EPA's proposed definitions.

We start with the definition of "asphalt processing facility". Proposed §63.8698 states in relevant part:

*Asphalt processing facility* means any facility engaged in the preparation of asphalt at asphalt processing plants, petroleum refineries, and asphalt roofing plants, petroleum refineries, and asphalt roofing plants. Asphalt preparation, called "blowing," is the oxidation of asphalt flux by bubbling air through the heated asphalt. An asphalt processing facility includes the following processes: asphalt heating, blowing stills, asphalt flux storage tanks, oxidized asphalt storage tanks, and oxidized asphalt loading racks.

SJR believes that it is important to clarify that a facility will not be subject to the standards unless it has asphalt blowing operations at the site. Otherwise, asphalt truly is not being processed at the facility. Yet the wording of the definition as proposed (particularly the third sentence) could lead someone to believe that units such as asphalt storage tanks found at a refinery are covered even though there is no asphalt processing taking place there. That would be contrary to the rule's intent, and would cause much confusion for all concerned. In addition, the rule should make clear that only those operations directly associated with the blowing are covered by the rule. Otherwise, there could be confusion about whether "upstream" processes at the refinery are covered.

These two problems can be solved by inserting the words “that directly support such asphalt preparation and are located at a facility containing a blowing still” immediately after “processes” in the third sentence of the definition of “asphalt processing facility”. Thus, the third sentence of the definition would read (with added language underscored): “An asphalt processing facility includes the following processes that directly support such asphalt preparation and are located at a facility containing a blowing still: asphalt heating, blowing stills, asphalt flux storage tanks, oxidized asphalt storage tanks, and oxidized asphalt loading racks.”

EPA should also insert a fourth sentence to the definition, which will clarify that a unit or process subject to the petroleum refinery MACT standards or any other MACT standards is not subject to the subpart LLLLL standards. The new fourth sentence should read: “Any unit or process subject to any other standard codified in any subpart of this Part 63 is not subject to the standards of this subpart.”

With the above corrections made, the definition of “asphalt storage tank” can be fixed easily. In the first sentence of the definition, “asphalt processing plants” should be changed to “asphalt processing facilities”, to make the term consistent with EPA’s term discussed directly above. In addition “petroleum refineries” should be deleted in this sentence – the parts of a petroleum refinery already subject to the rule are covered under the term “asphalt processing facility” (which expressly includes petroleum refineries). Thus, the corrected first sentence of the definition of “asphalt storage tank” should read: “*Asphalt storage tank* means any tank used to store asphalt, including asphalt flux, oxidized asphalt, and modified asphalt, at asphalt roofing manufacturing plants and asphalt processing facilities.”

Similarly, the correction to the definition of “asphalt loading rack” is a fairly simple one. EPA should add the following underscored words to the proposed one-sentence definition: “*Asphalt loading rack* means the equipment at an asphalt processing facility used to transfer asphalt from a storage tank into a tank truck, rail car, or barge.” Again, this change – together with the changes to the definition of “asphalt processing facility” discussed above – will ensure that loading racks not associated with asphalt processing operations are not subject to the subpart LLLLL standards.

## **2. Having Standards Apply Only to Asphalt for Roofing**

From the proposal and EPA’s supporting documents, it appears that EPA is focused on asphalt used in roofing manufacturing operations. Yet the first sentence of the proposed definition of “Asphalt processing facility” would sweep in all asphalt processing operations, regardless of whether the asphalt is to be used for roofing manufacturing, paving, or any other applications. The asphalt processing raw materials and procedures often

differs depending upon the type of asphalt made. For example, the feedstock and the oxidation process itself are likely to differ.

For these reasons, EPA should amend the first sentence of the definition of "asphalt processing facility" to make clear that the standards apply only to roofing asphalt processing. This can be done by adding the word "roofing" in the sentence, as shown here: "*Asphalt processing facility* means any facility engaged in the preparation of roofing asphalt at asphalt processing plants, petroleum refineries, and asphalt roofing plants."

### **C. Excluding Tanks and Loading Racks With Low Vapor Pressure**

As the EPA staff has previously been informed by the AI, SJR believes that it is inappropriate to regulate storage tanks with low volatile emissions. The same is true for loading racks. EPA certainly has discretion not to regulate units and processes with *de minimis* or low HAP emissions; the agency does this all the time in MACT rulemakings. Deciding not to establish standards for low-emitting units is particularly appropriate when, as is the case here, control costs are high. Yet, at asphalt processing facilities the proposed rule would regulate all asphalt storage tanks with a capacity greater than 1.93 megagrams (2.13 tons). See Table 1 to Subpart LLLLL, No. 1, and preamble at p. 58620, col. 1. It would also regulate *all* loading racks, regardless of capacity. See Table 1 to Subpart LLLLL, No. 1.

We suggest a better approach for determining applicability for asphalt storage tanks and loading racks. This proposal is taken directly from EPA's NSPS for storage tanks. 40 CFR part 60, subparts K, Ka, and Kb. In subparts K and Ka, petroleum liquid storage tanks are required to install a floating or fixed roof only if the stored liquid has a true vapor pressure equal to or greater than 1.5 psia. 40 CFR §§ 60.112(a)(1), 60.112a(a). We suggest using this same true vapor pressure threshold cutoff in the asphalt MACT standards; the tanks would be subject to the standards only if the stored liquid has a true vapor pressure greater than or equal to 1.5 psia.

If the vapor pressure does not reach this threshold value, there should be little concern about volatile HAP emissions. In fact, only five years ago an EPA Regional Office noted that the heavy nature of asphalt made emissions from storage tanks unlikely. In response to an inquiry from the Mississippi Department of Environmental Quality concerning the applicability of the subpart Kb NSPS to asphalt storage tanks, the Region explained that the tanks probably would not be subject to the rules because volatile emissions would be low. The applicability letter states: "Because asphalt is composed of heavy organic compounds, it may not emit VOCs to the atmosphere even if it is stored at an elevated temperature.... Because the vapor pressure of asphalt is very low, an owner or operator of asphalt storage tanks would probably be subject only to recordkeeping requirements...." Aug. 7, 1996 letter from Jewell A. Harper of EPA Region 4 to Dwight R. Wylie of the Mississippi Department of Environmental Quality, Control No. 9700029 in the Applicability Determination Index found on EPA's Web page.

The same basic principles regarding applicability thresholds that apply to storage tanks also apply to loading racks. If the vapor pressure on these loading racks at asphalt processing facilities is relatively low, the volatile emissions will also be low. It would not be cost-effective to route these low emissions to a thermal oxidizer, particularly because it may require extensive and costly ductwork to send the low-concentration gases to the control device. For these reasons, EPA should modify its asphalt MACT standards so that only loading racks with a true vapor pressure of 1.5 psia are subject to control requirements in the MACT standards.

#### **D. Incorrect Description of Health Effects**

SJR is very troubled by incorrect statements concerning health effects in the preamble to the proposal. See pp. 58612-13. The preamble describes health effects that, at the very least, would not be present when persons are exposed to hazardous air pollutants (HAP) at the concentrations emitted by asphalt processing facilities. Particularly because the title of the preamble section is "What Are the Health Effects Associated With the Asphalt Processing and Asphalt Roofing Manufacturing Source Categories?" (p. 58612, col. 2), EPA must take into account the low emissions (and resulting minimal exposure) associated with nearly all HAPs emitted from asphalt processing operations. Even if the health effects described in the proposal could result from exposure to high concentrations of the pollutants, they would not result from the concentrations found at or near asphalt processing facilities.

For example, irritation of mucous membranes and coughing and bronchitis occur only when high concentrations of formaldehyde are inhaled. Exposures of workers at an asphalt processing facility should be below the TLV of 0.3 parts per million (ppm). For the public, exposure would be significantly less. Thus, the effects EPA described in the preamble would not be found in the vicinity of asphalt processing facilities.

In addition, acute exposures at very high levels of hexane are needed to produce the central nervous system and neuromuscular effects described in the preamble. Even if minute amounts of hexane were emitted from asphalt processing facilities, the concentrations would be so minimal that none of the health effects described in the preamble would occur.

We could make similar points about the other HAP discussed in the proposal. We think EPA should make clear in the final rule that HAP concentrations at asphalt processing facilities are not high enough to cause the health effects described in the proposal.

**E. Conclusion**

SJR, as a "small" independent refiner that also processes asphalt for the paving and roofing industries, will be directly affected by the proposed rule if it is adopted without the revisions requested above. SJR strongly feels that the proposed rule should be reviewed with our comments in mind. We appreciate having this opportunity to submit our comments.

David G. Campbell



Environmental Manager